



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/526,954

09/12/2005

Fabien Cens

US21.1110

5396

23718

7590

03/23/2007

SCHLUMBERGER OILFIELD SERVICES

200 GILLINGHAM LANE

MD 200-9

SUGAR LAND, TX 77478

EXAMINER

RATCLIFFE, LUKE D

ART UNIT

PAPER NUMBER

3662

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
--	-----------	---------------

3 MONTHS

03/23/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/526,954	<b>Applicant(s)</b> CENS ET AL.	
	<b>Examiner</b> Luke D. Ratcliffe	<b>Art Unit</b> 3662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 08 March 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 13-24 is/are pending in the application.
- 4a) Of the above claim(s) 1-12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 13-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Priority*

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 13, 15, and 17-24 rejected under 35 U.S.C. 102(b) as being anticipated by Roesner (GB2294074).**

Referring to claim 13, Roesner shows a measuring sonde (figure 1 Ref 10), comprising a main body (figure 1 Ref 12), a downstream arm (figure 1 Ref 54), an upstream arm (figure 1 Ref 52), one of the arms fitted with measurement means for determining the characteristics of the fluid flowing in the well (figure 1 Ref 64 and 68), and wherein the downstream and upstream arms are connected to the main body respectively via first and second sliding pivot links (figure 1 Ref 60 and 44), and to respectively first and second ends of a skid via first and second pivot links (figure 1 Ref 56 and 38).

Referring to claim 15, Roesner shows a secondary arm connected firstly to the main body via a third pivot link and secondly to the skid via a third sliding pivot link (figure 1 Ref 54).

Art Unit: 3662

Referring to claim 17, Roesner shows the secondary arm is constituted by two parallel blades (figure 1).

Referring to claim 18, Roesner shows the secondary arm can be received inside the downstream arm (figure 1).

Referring to claim 19, Roesner shows the downstream arm and/or the upstream arm is/are constituted by parallel blades interconnected by bridges (figure 1).

Referring to claim 20, Roesner shows the axis of the main body is off-center relative to the axis of the well (Figure 1).

Referring to claim 21, Roesner shows the downstream and upstream arms are pivoted relative to the main body in a closed position in which the arms are received inside the main body and an open position in which the arms extend across the stream flowing along the well (figure 1).

Referring to claim 22, Roesner shows the downstream arm and/or the upstream arm is/are connected to a motor module enabling arm movement relative to the main body to be controlled, said motor module being deactivatable (figure 6 Ref 234).

Referring to claim 23, It is inherent in the construction of a motor module that the motor module and the downstream and/or upstream arms is separable. This is the definition of having modular parts.

Referring to claim 24, Roesner shows the upstream arm has measurement means for measuring the speed of the fluid flowing in the well (page 7-10).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roesner (GB2294074).**

Roesner shows a measuring sonde (figure 1 Ref 10), comprising a main body (figure 1 Ref 12), a downstream arm (figure 1 Ref 54), an upstream arm (figure 1 Ref 52), one of the arms fitted with measurement means for determining the characteristics of the fluid flowing in the well (figure 1 Ref 64 and 68), and wherein the downstream and upstream arms are connected to the main body respectively via first and second sliding pivot links (figure 1 Ref 60 and 44), and to respectively first and second ends of a skid via first and second pivot links (figure 1 Ref 56 and 38).

However Roesner does not teach using abutments on the first and second pivot links to limit the pivoting of the downstream and upstream arms. It would have been obvious to use such abutments in the first and second pivot links because the use of abutments is well known in the mechanical art and adds no new or unexpected results.

**Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roesner (GB2294074) in view of Wu (6137621).**

Art Unit: 3662

Roesner shows a measuring sonde (figure 1 Ref 10), comprising a main body (figure 1 Ref 12), a downstream arm (figure 1 Ref 54), an upstream arm (figure 1 Ref 52), one of the arms fitted with measurement means for determining the characteristics of the fluid flowing in the well (figure 1 Ref 64 and 68), and wherein the downstream and upstream arms are connected to the main body respectively via first and second sliding pivot links (figure 1 Ref 60 and 44), and to respectively first and second ends of a skid via first and second pivot links (figure 1 Ref 56 and 38). However Roesner does not show a secondary arm that includes optical measurement means.

Wu shows a similar measuring sonde that includes a secondary arm that also includes an optical measurement means (column 5 line 29-40). It would have been obvious to attach the optical measurement means to the secondary arm because this allows the measuring sonde to take measurements from inside the well as taught by Wu. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Luke D. Ratcliffe whose telephone number is 571-272-3110. The examiner can normally be reached on 10:00-5:00 M-Sun.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Tarcza can be reached on 571-272-6979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3662

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LDR



THOMAS H. TARCZA  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600